DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003709

Address: 333 Burma Road **Date Inspected:** 15-Aug-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2230 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Fu Yu Hong **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA Ultrasonic testing with Phased Array(UT)

The QA inspector re-scanned using the ultrasonic testing (UT) with the phased array (PA) technology after Caltrans representatives performed the preliminary scan with the conventional UT following ZPMC UT procedure for detecting lack of penetration at the junction of deck panels to U-ribs. The QA inspector confirmed additional crack like indications. Deck panels DP-008-001 and 078-001 had 1 additional indication each and deck panels DP-038-001 and DP-079-001 had 2 additional indications each.

Note: 2 Deck Panels were Purchased by CT for testing Initial procedural development and further procedure development & testing. At the time no writting procedure for phased array technology have been issued. However, all the test samples identified as crack indications were confirmed after macro-etching and magnetic particle testing.

Summary of Conversations:

The QA inspector did not any relevant conversation on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 858 344-8746, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By: Acuna, Alfredo Quality Assurance Inspector **Reviewed By:** Cochran,Jim QA Reviewer